



July 2019

Proposed Initial Upstream Sampling Work Plan

Upper Ley Creek Watershed



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A handwritten signature in black ink, appearing to read "Katherine Lasseter".

Katherine Lasseter
Principal Scientist/Program Director

Prepared for:
RACER Trust and Knauf Shaw LLP

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Project number:
2019.0472



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Upper Ley Creek Watershed

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1. Introduction

This Proposed Initial Upstream Sampling Work Plan (Work Plan) has been developed by TIG Environmental¹ on behalf of Revitalizing Auto Communities Environmental Response Trust (RACER Trust) and Knauf Shaw LLP (Knauf Shaw) to identify historic and present contamination sources to support RACER Trust and Knauf Shaw in litigation proceedings stemming from Civil Action No.: 5:18-cv-1267 [DNH/ATB] filed on October 26, 2018, as well as to aid in efforts to identify sources that may recontaminate Ley Creek. This Work Plan identifies proposed sediment and soil sampling locations in the upstream tributaries and at the defendant sites to determine which of the defendants named in the Amended Complaint may or may not be partially responsible for contamination observed in Ley Creek.

2. Litigation Background

In its Amended Complaint, RACER Trust, by its attorneys Knauf Shaw, brings claims for cost recovery and contribution claims under Sections 107(a) and 113 (f) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9607(a) and 9613(f), and other claims, against parties (defendants) that have allegedly owned and/or operated sites (defendant sites) in or around the Upper Ley Creek Watershed in Onondaga County, New York that discharged polychlorinated biphenyls (PCBs) or other contaminants, or arranged for disposal of PCBs and other contaminants. The Upper Ley Creek Watershed, as defined in this Work Plan, consists of the area east of Route 11, including the OU-2 area. The OU-2 area consists of Ley Creek from Townline Road west to Route 11, including creek banks and limited floodplain and hotspot areas, and all tributaries upstream of Townline Road Bridge (see details below). The Ley Creek headwaters and adjacent areas have not been systematically investigated for the presence of PCBs and other types of contamination that could have historically contributed, or are currently contributing to, ongoing discharges that may be recontaminating the creek and/or the OU-2 area.

3. Sampling Conceptual Scope of Work

Under this scope of work, TIG Environmental proposes conducting focused sediment and upland soil sampling to characterize the composition and concentration of PCBs and other contaminants in the following areas of the Upper Ley Creek Watershed:

- The main channel of Ley Creek upstream of the Townline Road Bridge (an approximately 9,200-linear-foot stretch from Townline Road to Route 11).
- Tributaries of Ley Creek upstream of Townline Road Bridge (including, but not limited to, North Branch Ley Creek, South Branch Ley Creek, Sanders Creek, and Teall Brook).
- The historical channel of Ley Creek filled in during New York (NY) State Thruway construction.

¹ TIG Environmental is a member of The Intelligence Group, LLC.



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- The area of the old channel of Ley Creek relocated by Onondaga County from approximately 1970 until the mid-1980s.
- Areas of defendant sites where evidence suggests operations may have contributed to Ley Creek contamination.

The objectives of this sampling effort are to supplement existing site characterization data, facilitate forensic analysis of PCB signatures observed in environmental media, identify other contaminants that may be associated with PCB discharges, and identify potential upstream contamination sources.

TIG Environmental has reviewed documentation gathered for each defendant site and OU-2 to determine the contaminants detected or potentially released from each site. The results of TIG Environmental's analysis will provide data necessary to determine which sites historically, and at the present time, may or may not be sources of contamination in the Upper Ley Creek Watershed, including OU-2, and identify any current or historical discharges that can be associated with other parties or sites not already identified in the Amended Complaint.

This preliminary Work Plan is intended to provide a general outline of the sediment and soil sampling proposed for Ley Creek, its tributaries, and identified defendant sites. A detailed Sampling and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP) will be developed upon completion of site reconnaissance activities. The following sections discuss general proposed sampling areas, sampling methodologies, and proposed analytical parameters.

3.1 Sediment Sampling in Ley Creek and Tributaries Upstream of Townline Road

TIG Environmental will perform focused sediment sampling in the main channel of Ley Creek and the associated tributaries of Ley Creek upstream of Townline Road Bridge. The following general areas are currently proposed for sampling in tributaries:

- Near outfalls and other discharge points, such as drainage ditches
- Creek banks where direct discharge via overland flow may have occurred
- Floodplain areas where sediment deposition may have occurred

Proposed sediment sampling locations are shown on Figure 1.

3.2 Soil and Sediment Sampling of Historic Channels and Defendant Sites

TIG Environmental will perform focused soil and sediment sampling at the historical channel of Ley Creek filled in during NY State Thruway construction and the area of the old channel relocated by Onondaga County. In addition, TIG Environmental has proposed to perform soil sampling at defendant sites where review of evidence and data strongly suggest that operations at a defendant site may have contributed to Ley Creek Watershed contamination. The following areas are currently proposed for sampling:

- Areas in the historical channel of Ley Creek filled in during NY State Thruway construction



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- Areas of the old channel of Ley Creek relocated by Onondaga County from approximately 1970 until the mid-1980s
- Near defendant site discharge points such as drainage ditches, if identified
- Catch basin sediments in defendant site drainage structures that connect to Ley Creek or its tributaries, if identified
- Areas of defendant sites where evidence suggests operations may have contributed to Ley Creek Watershed contamination

Proposed upland soil and sediment sampling locations are shown on Figure 1.

3.3 Sampling Methodologies

Upland soil and sediment samples will be collected with the assistance of a qualified subcontractor under supervision and guidance of qualified TIG Environmental staff. Sampling methodologies will depend on access to county- and state-owned property and defendant sites, soil conditions, creek conditions, and sampling depths. This will be determined during site walks with the sampling subcontractor.

Sampling will be performed in accordance with TIG Environmental's Standard Operating Procedures (SOPs)², U.S. Environmental Protection Agency (EPA) and New York State Department of Environmental Conservation (NYSDEC) guidance, and general industry standards and practices. TIG Environmental will collect sufficient material for all chemical analyses and will archive samples for follow-up analyses. TIG Environmental field personnel will process samples in a dedicated processing area to be identified. Sample processing will include documenting geologic descriptions and soil classification per the Unified Soil Classification System (USCS); and photographing, compositing, and transferring samples into laboratory-provided containers. After processing samples, TIG Environmental will prepare them for shipment to laboratories for chemical analysis. Samples will be shipped in laboratory-provided containers, set on ice in coolers and under strict chain-of-custody procedures. The chain-of-custody forms from each day of field sample collection will be reviewed and approved by the senior project team. A split sample will be made available for testing by defendants if requested in writing ten (10) days prior to sampling.

3.4 Chemical Analysis

Chemical analysis must meet the requirements defined in the project QAPP.³ All sediment and soil samples will be analyzed by a NY State-accredited laboratory following NYSDEC Analytical Service Protocol (ASP) (NYSDEC 2005), where applicable, for the following by the method indicated:

- PCB Aroclors (EPA Method 8082A)
- PCB congeners (EPA Method 1668C)

² Project-specific SOPs will be developed as part of the SAP.

³ The QAPP will be developed in conjunction with the SAP.



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- PAHs (EPA Method 8270D)
- Metals (EPA Methods 6010 and 7471)
- Total organic carbon (Lloyd Kahn method)
- Grain size (ASTM D422)
- Total Solids (ASTM Method D2216-98)

A third-party data validator will validate the laboratory results to ensure data quality and usability for the project. At a minimum, data will be validated to EPA Level IIb⁴ (EPA 2009).

3.5 Field Documentation

Documentation of field activities will provide an accurate and comprehensive record of the work performed, sufficient for a technical peer to reconstruct the day's activities and provide certification that all or necessary client, regulatory, contract, and sampling requirements have been met. Unique sample identification name, sample date, and sample time will be logged into a dedicated project field notebook. Typical information documented in the field notebook will include, but not be limited to, the following:

- Names of TIG Environmental field staff and subcontractors
- Field arrival and departure time
- General observations made during sample retrieval or location inspection (for example, weather conditions or any other factors that may influence the quality of data)
- Health and safety observations
- Observations during sample collection
- Unique sample name
- Sample date and time
- Sample depth
- Description of sample, including color, odor, or presence of sheen
- Geologic description and soil classification per the USCS
- Photographic log
- Sample handling, processing, and shipping procedures

Upon completion of field activities, field staff will prepare a field report based on the field documentation for each day of field activities. The field reports will be reviewed and approved by the senior project team.

⁴ Per EPA laboratory guidelines, Level IIb validation consists of verification and validation based on completeness and compliance checks of sample receipt conditions and both sample-related and instrument-related quality control (QC) results (EPA 2009).



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3.6 Project Schedule

Sampling activities are anticipated to be performed in the fall of 2019 if access can be obtained. Laboratory analytical results are anticipated within a maximum of 20 business days after submitting samples to the laboratory, using standard turnaround times. Analytical data will be validated per QAPP outlined procedures (to be developed) by a qualified third-party data validator after receipt. Data validation is expected to be complete four-to-six weeks after receiving the final laboratory data packages. Upon completion of data validation, TIG Environmental will prepare a Data Evaluation Report summarizing field activities completed and any deviations from the approved SAP and QAPP and presenting the analytical data results.

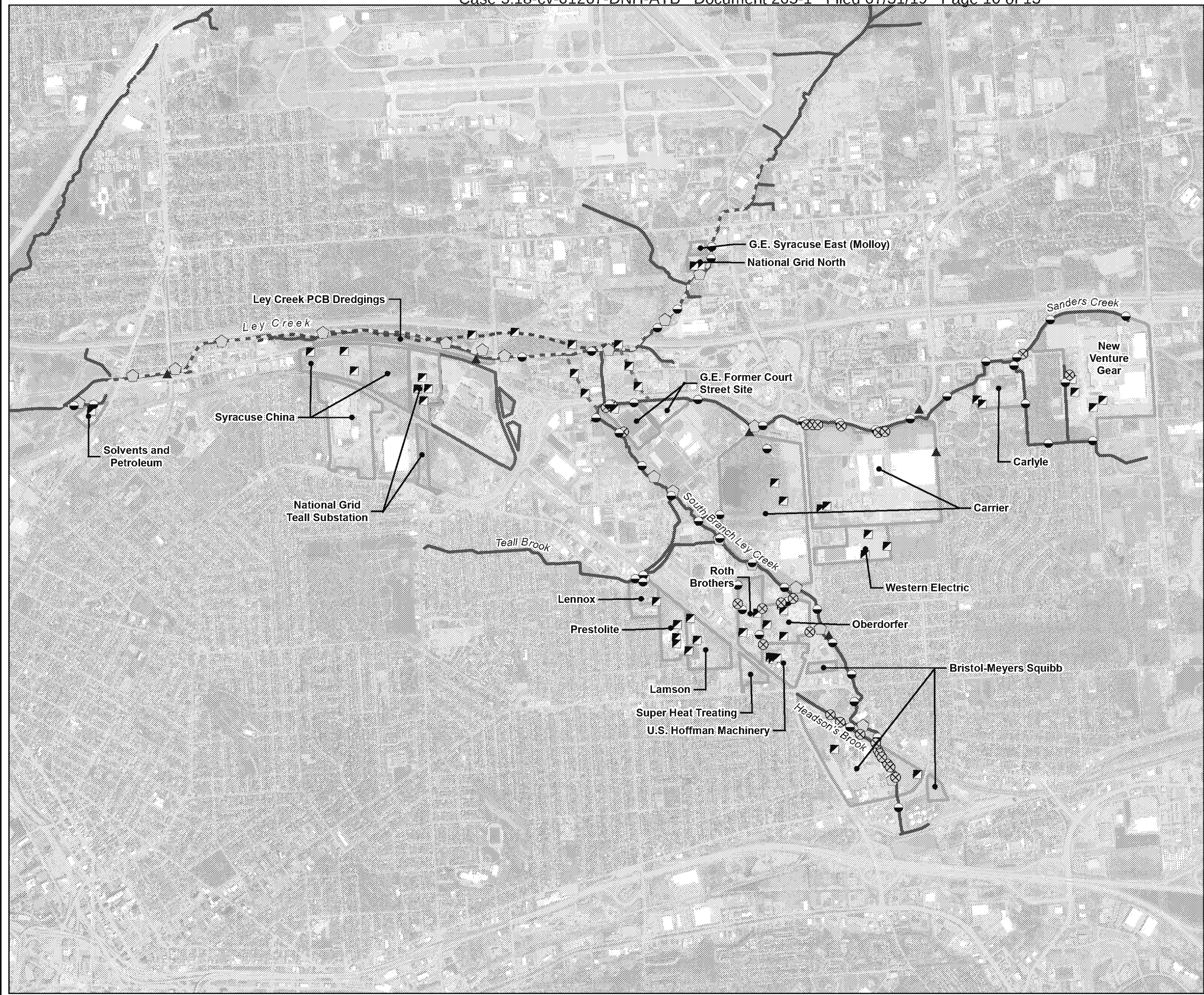
4. References

- EPA (U.S. Environmental Protection Agency). 2009. Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use.
- NYSDEC (New York State Department of Environmental Conservation). 2005. Analytical Service Protocol. July.
- NYSDEC (New York State Department of Environmental Conservation) and EPA (United States Environmental Protection Agency) Region II. 2015. Record of Decision Operable Unit 2 of the General Motors – Inland Fisher Guide Subsite of the Onondaga Lake Superfund Site. March. Salina.
- NYSDEC (New York State Department of Environmental Conservation). 2015. OU-1 (RI/FS/RD/RA) and OU02 (RD/RA) Order on Consent and Administrative Settlement Index # R7-0853-15-06 Site # 734057. October. Salina.
- RACER (Revitalizing Auto Communities Environmental Response Trust and Racer Properties LLC). 2019. Amended Complaint. United States District Court Northern District of New York (NY District Court), Civil Action No: 5:18-cv-1267 [DNH/ATB].
- RACER (Revitalizing Auto Communities Environmental Response Trust and Racer Properties LLC). 2018. Complaint. United States District Court Northern District of New York (NY District Court), Civil Action No: 5:18-cv-1267 [DNH/ATB].
- RACER (Revitalizing Auto Communities Environmental Response Trust and Racer Properties LLC). 2019. Ley Creek Watershed Contamination & PRP Meeting Presentation. January. Syracuse.

Figures



Data Location: Syracuse Created By: kmontague Modified By: kives
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Legend:

- | | |
|--|---|
| ● Proposed sediment sampling location | —— Creek |
| ■ Proposed soil sampling location | - - - - Former channel |
| ⬠ 1996 PISCES sediment sampling locations | - - - - 1947 Ley Creek pathway |
| ⊗ Identified outfall based on site records | - - - - 1975 Ley Creek pathway |
| ▲ Urban area outfall (SWCD) | □ Defendant site |
| | □ GM-Inland Fisher Guide Operations (OU-1) Site |

Notes:

1. Aerial imagery provided by Esri's World Imagery Service.
2. Inset map is not to scale.
3. Site boundaries are shown as provided by RACER Trust on May 15, 2019.
4. Urban area outfalls were created by Central New York Regional Planning and Development Board (CNYRPD) 11/15/2018 and provided by ESRI's map service.

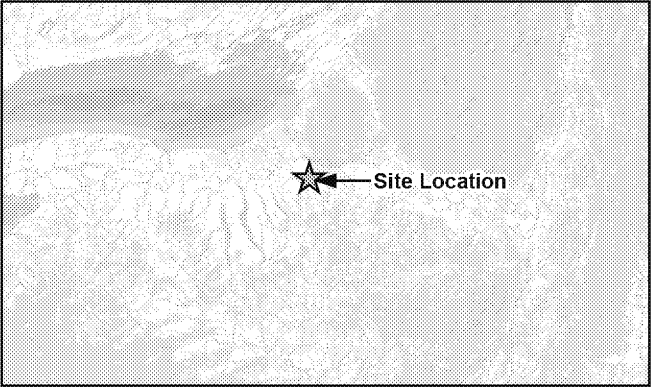
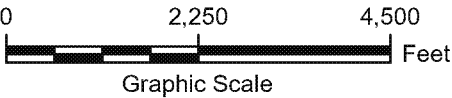


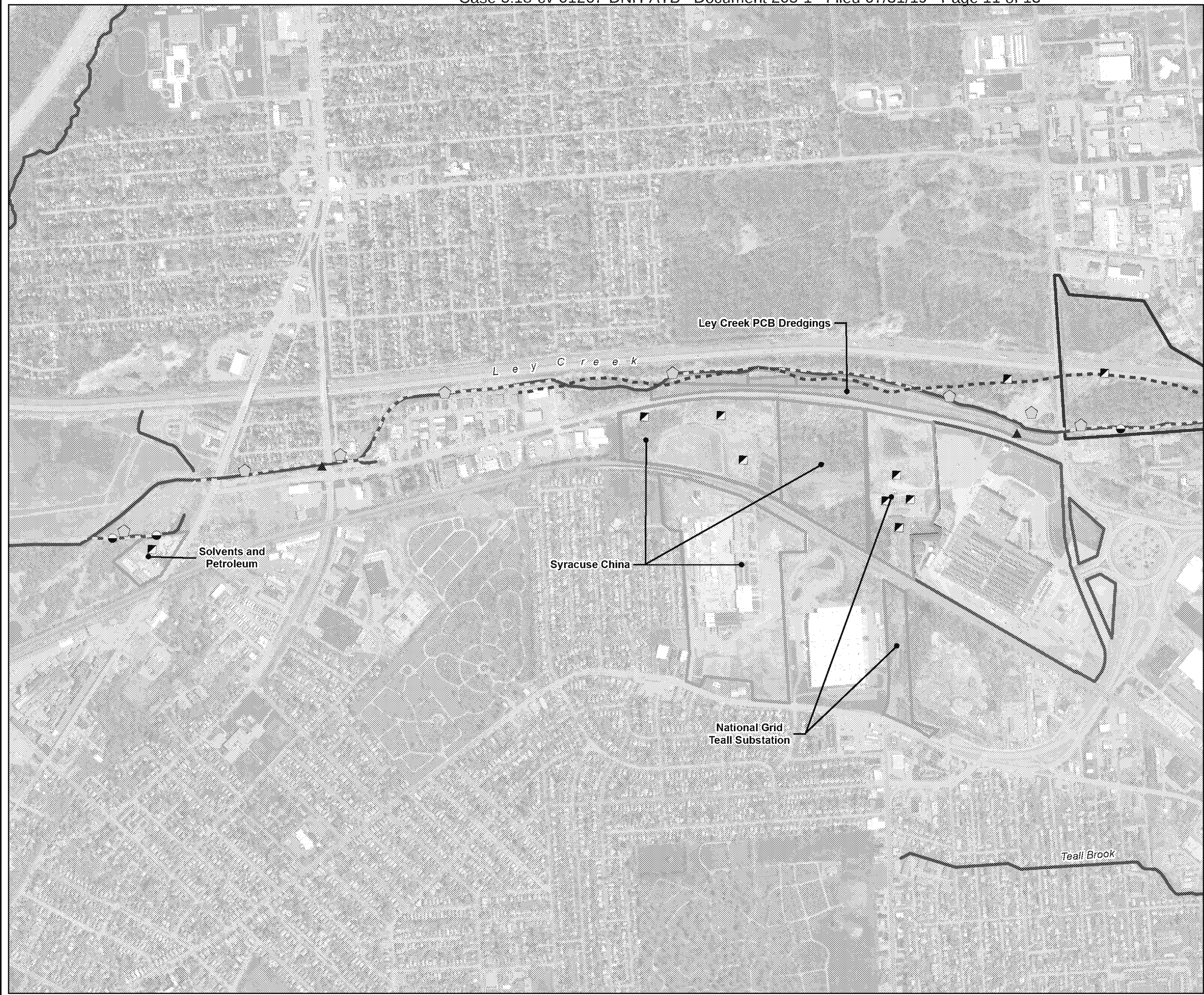
Figure 1: Proposed Soil and Sediment Sampling Locations

Proposed Initial Upstream Sampling Work Plan

RACER Trust/Knauf Shaw
Ley Creek Watershed



Data Location: Syracuse Created By: kmontague Modified By: kives
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Legend:

- | | |
|--|---|
| ● Proposed sediment sampling location | ----- Creek |
| ■ Proposed soil sampling location | - - - - - Former channel |
| ⬠ 1996 PISCES sediment sampling locations | - - - - - 1947 Ley Creek pathway |
| ⊗ Identified outfall based on site records | - - - - - 1975 Ley Creek pathway |
| ▲ Urban area outfall (SWCD) | □ Defendant site |
| | □ State or county owned parcel |
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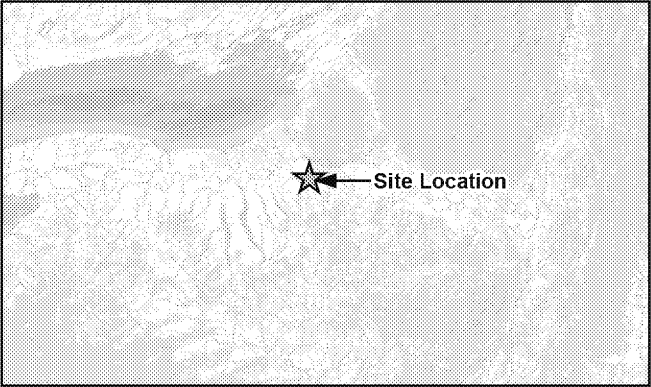
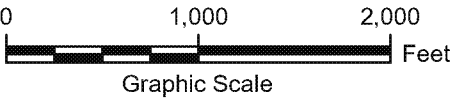


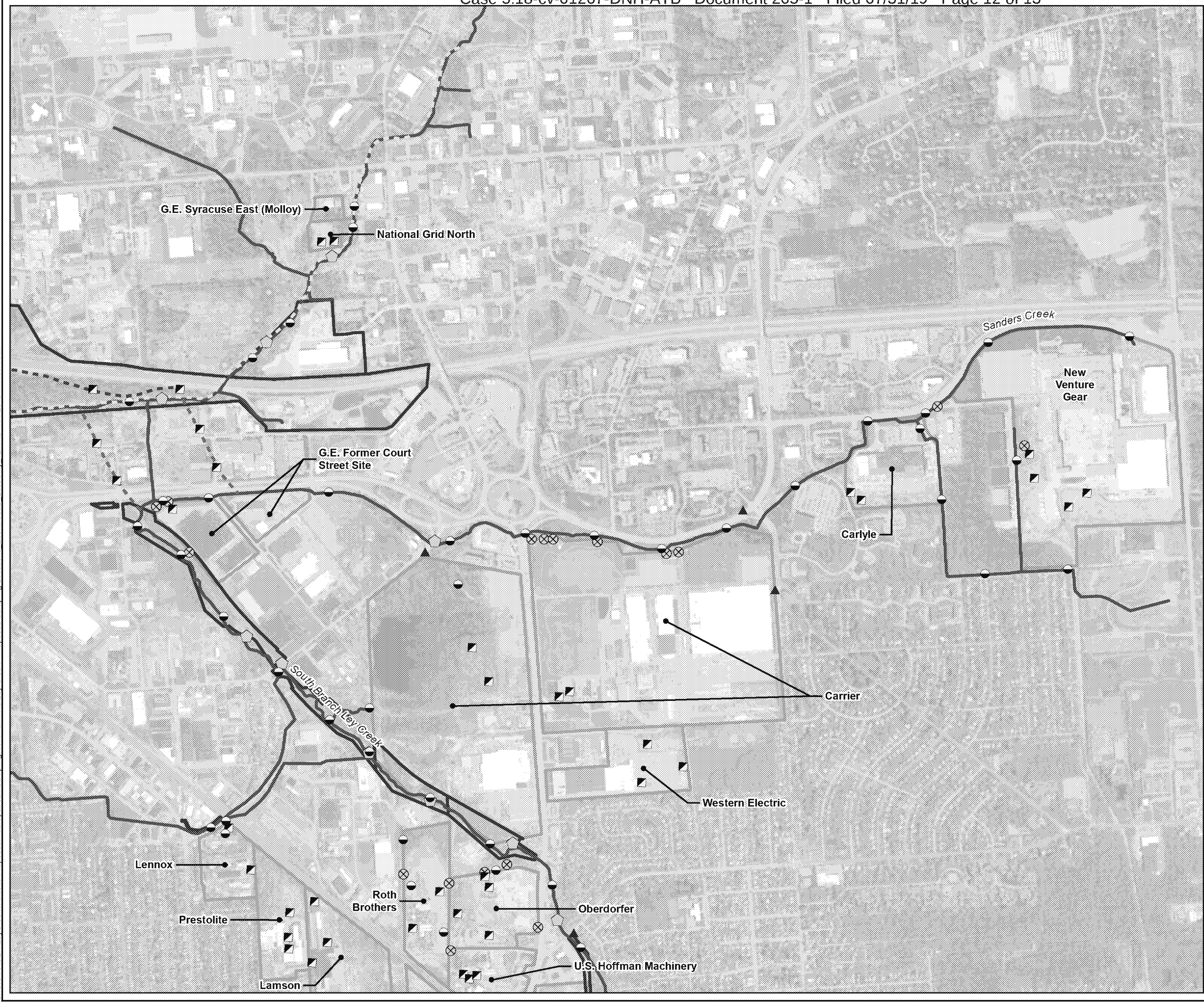
Figure 1A: Proposed Soil and Sediment Sampling Locations

Proposed Initial Upstream Sampling Work Plan

RACER Trust/Knauf Shaw
Ley Creek Watershed



Data Location: Syracuse Created By: kmontague Modified By: kives
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Legend:

- | | |
|--|---|
| ● Proposed sediment sampling location | ----- Creek |
| ■ Proposed soil sampling location | - - - - - Former channel |
| ⬠ 1996 PISCES sediment sampling locations | - - - - - 1947 Ley Creek pathway |
| ⊗ Identified outfall based on site records | - - - - - 1975 Ley Creek pathway |
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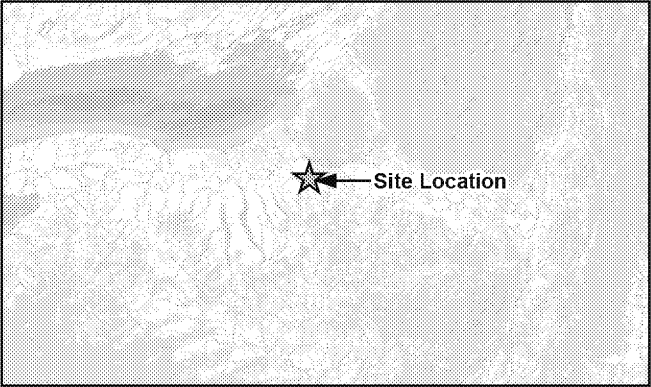
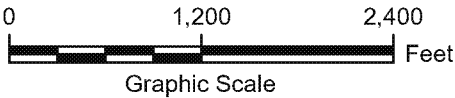


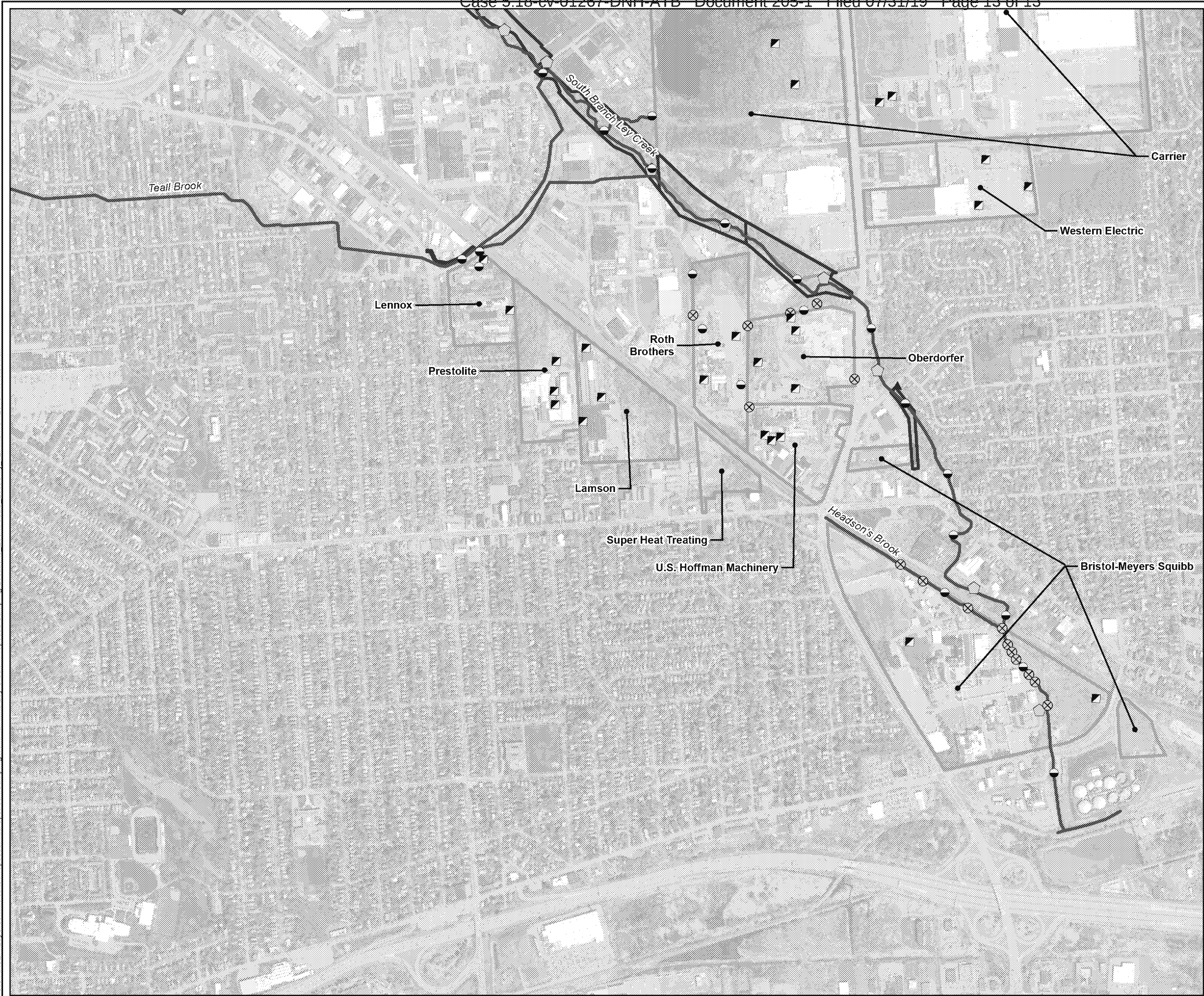
Figure 1B: Proposed Soil and Sediment Sampling Locations

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RACER Trust/Knauf Shaw
Ley Creek Watershed



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Legend:

- | | |
|--|---|
| ● Proposed sediment sampling location | ----- Creek |
| ■ Proposed soil sampling location | - - - - - Former channel |
| ⬡ 1996 PISCES sediment sampling locations | - - - - - 1947 Ley Creek pathway |
| ⊗ Identified outfall based on site records | - - - - - 1975 Ley Creek pathway |
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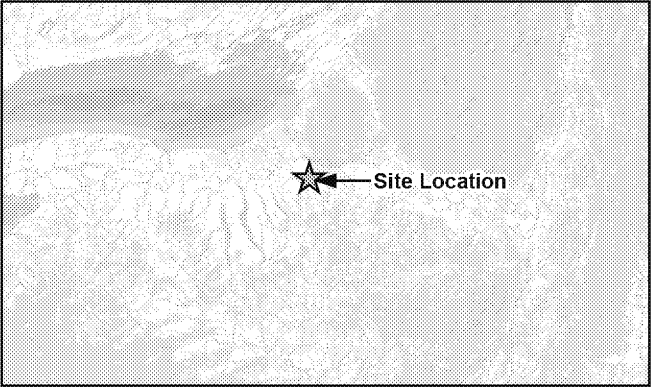
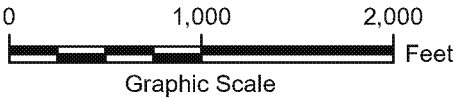


Figure 1C: Proposed Soil and Sediment Sampling Locations

Proposed Initial Upstream Sampling Work Plan

RACER Trust/Knauf Shaw
Ley Creek Watershed

